

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. -4. (Canceled)
5. (Previously Presented) A bit error rate (BER) testing apparatus, comprising:
 - a computer that commands a BER test through a BER test command, receives a BER value according to the BER test command, and displays the BER value;
 - a roadside equipment that transmits a BER test message according to the BER test command; and
 - an on-board equipment that compares the BER test message received from the roadside equipment with a previously stored BER test message to compute the BER value and transmits the BER value to the computer via the roadside equipment,wherein the BER test message comprises:
 - one frame control message channel (FCMC) positioned at the front of the BER test message, the FCMC having system information and exclusively used for a backward link; and

a plurality of message data channels (MDCs) comprising data to be transmitted between the roadside equipment and the on-board equipment, the plurality of MDCs set as a certain value conforming to a dedicated short range communication (DSRC) standard and used for the backward link and a forward link.

6. (Original) The apparatus of claim 5, wherein each of the plurality of MDCs comprises:

a preamble field (PR) positioned at the front of the MDC;

a channel synchronization word field (CSW) that provides a channel synchronization;

a media access control (MAC) field that indicates whether the MDC is forward data or backward data and indicates a data length;

a MAC service data unit field (MSDU) that contains data known commonly by the roadside equipment and the on-board equipment; and

a cyclic redundancy error check sequence (CRC) field used to detect whether there is an error in any field other than the PR and the CSW fields.

7. -12. (Canceled)

13. (Previously Presented) A bit error rate (BER) testing method, comprising:
 - recognizing, with a roadside equipment and an on-board equipment, an operation mode determined by an output of a switch;
 - starting a BER test between the roadside equipment and the on-board equipment according to a BER test command, if the operation mode is a BER test mode;
 - transmitting a BER test message from the roadside equipment to the on-board equipment and performing a BER check on the received BER test message with the on-board equipment; and
 - reporting a BER value according to the BER check,
- wherein the BER test message comprises:
 - one frame control message channel (FCMC) positioned at the front of the BER test message, the FCMC having system information and exclusively used for a backward link; and
 - a plurality of message data channels (MDCs) comprising data to be transmitted between the roadside equipment and the on-board equipment, the plurality of MDCs set as a certain value conforming to a dedicated short range communication (DSRC) standard and used for the backward link and a forward link.

14. (Original) The method of claim 13, wherein each of the plurality MDCs comprises:
- a preamble field (PR) positioned at the front of the MDC;
 - a channel synchronization word field (CSW) that provides a channel synchronization;
 - a media access control (MAC) field that indicates whether the MDC is forward data or backward data and indicates a data length;
 - a MAC service data unit field (MSDU) that contains data known commonly by the roadside equipment and the on-board equipment; and
 - a cyclic redundancy error check sequence field used to detect whether there is an error in any field other than the PR and the CSW fields.

15. -16. (Canceled)

17. (Previously Presented) A bit error rate (BER) testing method of a dedicated short range communication (DSRC) intelligent transport system (ITS), comprising:
- transmitting a BER testing initiation message from a PC or a local server to a roadside equipment;
 - recognizing an operation mode of the roadside equipment as a BER test

mode, based on the BER testing initiation message, and transmitting the BER testing initiation message to an on-board equipment;

recognizing the operation mode of the on-board equipment as the BER test mode, based on the BER testing initiation message;

storing a number identifying an amount of data to be received by the on-board equipment, included in the BER testing initiation message;

transmitting a response to the BER testing initiation message from the on-board equipment to the roadside equipment;

transmitting the response to the BER testing initiation testing message to the PC or the local server and transmitting a BER test message from the roadside equipment to the on-board equipment;

comparing data of the BER test message received by the on-board equipment with data of a standard BER test message, previously stored in a memory of the on-board equipment, and measuring a BER value;

transmitting the measured BER value from the on-board equipment to the roadside equipment;

transmitting the BER value to the PC or the local server and transmitting a response to receipt of the BER value to the on-board equipment; and

storing the BER value in the memory of the on-board equipment, if no
response is received indicating the receipt of the BER value,

wherein the BER test message comprises:

one frame control message channel (FCMC) positioned at the front of the
BER test message, the FCMC having system information and exclusively used for a
backward link; and

a plurality of message data channels (MDCs) comprising data to be transmitted
between the roadside equipment and the on-board equipment, the plurality of MDCs set as a
certain value conforming to a DSRC standard and used for the backward link and a forward
link.

18. – 19. (Canceled)